

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Andreas Weber	)
		)
Serial No.:	10/782,565	) Art Unit
		) 2613
Filed:	February 19, 2004	)
		)
For:	MODULE HAVING TWO BI-DIRECTIONAL	)
	OPTICAL TRANSCEIVERS	)
		)
Confirmation No.:	5154	)
		)
Customer No.:	022913	)
		)
Examiner:	Agustin Bello	)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop **APPEAL**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

A succinct, concise and focused set of arguments for which the panel review is being requested begins on page 2.

## **ARGUMENTS**

Reconsideration of the application by a panel of examiners is respectfully requested in view of the following remarks. Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the clear errors and omissions needed for a *prima facie* rejection. In addition, Applicants request that the Panel carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Panel's understanding.

### **I. PRIOR ART REJECTIONS**

#### **A. Rejection Under 35 U.S.C. § 103**

The Examiner rejects claims 13-17 and 24-30 under 35 U.S.C. § 103 as being unpatentable over *Wojtunik* (U.S. Patent No. 6,211,978) in view of *Hoag* (U.S. Patent No. 5,712,936). The Applicant respectfully traverses the rejection of claims 13-17 and 24-30 as the Examiner has not shown that the combination of *Wojtunik* and *Hoag* teach or suggest each and every element of the claims. The Applicant further traverses the rejection of claims 13-17 and 24-30 as the Examiner has misinterpreted *Wojtunik*, and as a result, *Wojtunik* does not provide the relied upon motivation for the proposed modification. Finally, the Applicant traverses the rejection of claims 13-17 and 24-30 as the *Wojtunik* directly teaches away from the modification suggested by the Examiner.

The Applicant respectfully traverses the rejection of claims 13-17 and 24-30 as neither *Wojtunik* nor *Hoag* teach or suggest or suggest each and every element of the claims. According to the Examiner "all elements including and to the left of reference numeral 14" are a "first bi-directional communications module". In electronics, a "module" is defined as "A packaged assembly of wired components, built in a standardized size and having standardized plug-in or solderable terminations."<sup>1</sup> For example, the Applicant provides examples of "modules" consistent with this standard definition in paragraphs [0030] and [0039] of the specification.

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<sup>1</sup> McGraw-Hill Dictionary of Scientific and Technical Terms (5<sup>th</sup> Ed. 1994).

However, the applicant is unable to find disclosure in *Wojtunik* that all elements including and to the left of reference numeral 14 are a “module”, that is, that these elements are a packaged assembly of wired components, built in a standardized size and having standardized plug-in or solderable terminations according to the definition of the term “module”. As disclosed by the Applicant in paragraphs [0013] and [0027], one of the advantages of the invention is that identical modules (see Fig. 3) may be provided on both ends of two optical fibers. This configuration can double the data transmission across conventional fiber optic cable without the need for auto-negotiation or echo cancellation devices (such as the “critical” isolators in *Wojtunik* at col. 6, lines 43-49). Therefore, the Applicant respectfully requests that the rejection of claims 13-17 and 24-30 be withdrawn as the Examiner has not shown that the references disclose modules as required by claims 13 and 15.

The Applicant further traverses the rejection of claims 13-17 and 24-30 as the Examiner has misinterpreted *Wojtunik*, and as a result, *Wojtunik* does not provide the relied upon motivation for the proposed modification. The Examiner admits on page 3 of the Office Action, that *Wojtunik* fails to teach a second optical fiber in optical communication with each of the second transceiver and the third transceiver. However, the Examiner alleges that *Wojtunik* suggests in column 8, lines 45-47 “a second optical fiber in optical communication with each of the second transceiver and the third transceiver.” The Applicant respectfully disagrees that column 8, lines 45-47 of *Wojtunik* suggests a second optical fiber in communication with each of the second and third transceivers as alleged. Rather, *Wojtunik* teaches that the single optical fiber may be part of a bundle of optical fibers, but transmission of the optical signals remains across a single one of the bundle of optical fibers.

In direct contrast to the assertions in the Office Action, column 8, lines 45-47 of *Wojtunik* teach the following, “For example, the single optical fiber 18 can be provided by a single fiber of a fiber optic cable having multiple fibers, or having only a single fiber.” (Emphasis added). This portion of *Wojtunik* clearly does not suggest a second optical fiber in optical communication with each of the second and third transceivers as alleged. Rather, this portion further reinforces the entire teachings of *Wojtunik* related to communication over a single fiber. Therefore, the Applicant respectfully requests that the rejection of claims 13-17 and 24-30 be withdrawn as the

Examiner has misinterpreted *Wojtunik*, and as a result, *Wojtunik* does not provide a predictable reason for the proposed modification as alleged

In fact, to suggest that *Wojtunik* teaches communication over a second fiber ignores the express purpose and teachings of *Wojtunik* – to enable bidirectional communication across a single optical fiber using signals of the same frequency. See BACKGROUND OF THE INVENTION in *Wojtunik*. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, ... would be led in a direction divergent from the path that was taken by the Applicant.”<sup>2</sup> “[R]eferences that teach away cannot serve to create a prima facie case of obviousness.”<sup>3</sup>

*Wojtunik* relates to “bidirectional transmission of two or more modulated light signals over the same fiber optic fiber at the same time.” FIELD OF THE INVENTION (emphasis added). In fact, *Wojtunik* is directed to the conventional embodiment discussed in paragraph [0011] of the Applicants specification. As disclosed by the Applicant in paragraph [0011], “the use of identical wavelengths [in both directions] results in a problematic optical reflection that can be caused by fiber interconnects so that a receiver sees the data transmissions from the transmitters at both ends of the optical cable rather than just the intended transmitter at the opposite end of the optical cable.” This is the exact purpose of *Wojtunik* - to attempt to solve the problem of sending bidirectional information of the same wavelength across a single optical fiber. See Figs. 1-9. This problem of back reflection is why *Wojtunik* says that isolators are critical in such embodiments. Col. 6, line 8. Where two fibers are used as suggested by the Examiner, such isolators would not be critical but rather would be irrelevant. Thus, to modify *Wojtunik* for communication over a second optical fiber entirely ignores the teachings of *Wojtunik*. One of ordinary skill in the art would not have been motivated to modify *Wojtunik* in a fashion that expressly undoes the exact solution to the problem which *Wojtunik* is directed to solve. As such, the Applicants respectfully request that the rejection of claims 13-17 and 24-30 be withdrawn.

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<sup>2</sup> *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999).

<sup>3</sup> *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339 (Fed Cir 2001) (emphasis added).

### **CONCLUSION**

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 28th day of November, 2007.

Respectfully submitted,

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